

Abstract Of The Disclosure

A method and a device are described for detecting a fault current across a piezoelectric actuator of an injector or its high voltage supply lead. Because the fault current upon contact with a person, for example, is relatively small compared to the useful current that charges or discharges the actuator, direct measurement of the current is not reliable. Therefore, it is suggested that, during the injection or in an injection pause, when the piezoelectric actuator is charged, the voltage variation or a change in voltage be measured and the difference be compared to a predefined threshold value. When the threshold value is exceeded, a fault message is produced, the voltage source is shut off, and/or the piezoelectric actuator is discharged. The measured fault can be weighted using a counting algorithm. The method thus provides maximum protection upon contact, in particular for service personnel.

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